

LIGHT EMITTING DIODES WITH GRADED COMPOSITION ACTIVE REGIONS

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ABSTRACT OF THE DISCLOSURE

A light emitting device in accordance with an embodiment of the present invention includes a first semiconductor layer of a first conductivity type having a first surface, and an active region formed overlying the first semiconductor layer.

- 10 The active region includes a second semiconductor layer which is either a quantum well layer or a barrier layer. The second semiconductor layer is formed from a semiconductor alloy having a composition graded in a direction substantially perpendicular to the first surface of the first semiconductor layer. The light emitting device also includes a third semiconductor layer of a second conductivity
- 15 type formed overlying the active region.